EMERGENCY SURVIVAL GUIDE

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COMPILED BY CLARISE DU PLESSIS FOR LIVE READY
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Foreword

This document is not intended as advanced reading material but rather a lay essential guide and memo based on my own (and others') experience on surviving in the wilderness and through disasters. It should by no means be considered a professional guide but rather a recommendation for the worst-case scenario. I have tried to apply it to some circumstances people may face.

I have compiled this guide for the lay person in case of an emergency such as a house fire, war or other disaster during which one needs to evacuate as a matter of urgency and may need to survive in an uninhabited area for a time. I have also briefly discussed being lost in the wilderness. It is intended to be quick reading and studied in advance in order to be prepared for unprecedented circumstances. This guide can be used as a tick list to prepare for an emergency.

Proverbs 11v14 tells us to seek wisdom from many councillors, therefore I would be grateful for anyone who has experience in survival to make recommendations for this guide. I have compiled information from many sources that I have cross-checked to ensure accuracy. This however does not exempt me from errors. I recommend that anyone who reads this do their own additional research to compliment this, especially as resources and environments vary vastly.

For more information or for video material you can visit the Live Ready Youtube channel.

Preparation is key

You may not have the opportunity to gather all the items mentioned below depending on your circumstances. You may find yourself in a scenario where you have a few minutes or even just seconds to escape a disaster. For this reason, it is wise to be prepared for an emergency. Should you have the time, make good use of it without delay and always ensure that you are prepared for the worst-case scenario whether it comes in the form of fire, famine, war, flood, ecological disaster or other threats. Items to be contained in a bug out bag are discussed below and I have tried to list them in order of priority.

- Wisdom
  You should always keep a "go bag", also known as a bug out bag, near where you sleep, even at home. It should contain essentials that you preferably do not remove from the bag. It should be easily accessible, and you should be able to find it in the dark for two reasons. Firstly, you may need to grab it when there is no light available e.g. during a power outage at night that may be caused by fire or another impending disaster. Secondly, should you at any point need to flee from another person or your life be endangered during for any reason, you should not turn on any lights. Any light that helps you to see, will also make you visible to anyone searching for you and reveal your location.

About your bug out bag
It should be a colour like your environment or in a neutral colour. Black is tempting but it is more conspicuous than some neutrals and difficult to blend into the natural environment. Grey is a neutral colour and will help you to avoid looking like you are part of military personnel, which is also why camouflage might get you in trouble. A lightweight durable fabric hiking bag is ideal as this is easy to carry for long distances. A good hiking bag has a padded waist strap, shoulder straps and very importantly, a chest strap that joins the shoulder straps together over your sternum. This will balance the weight between your hips and shoulders minimizing strain if you need to carry it for extended periods. Having a

hiking bag as a bug out bag also frees your hands and keeps you mobile. Do not opt for something too small, anywhere between 40-70L should be fine. The size bag that you choose will also depend on your skill level. The more advanced your skills are, the less gear you will need. If you are not in excellent physical shape, avoid packing a bag that weighs more than 15% of your own body weight.

You should consider how you could move through small spaces with your bag. If you need to escape through a window, it would be advisable to keep a bag that is well fitted to you, has a carry strap and is not oversized. Some bags come with a waterproof cover. Beware not to choose one in a

bright colour if you do not want to be spotted as you might find yourself in an escape and evade situation. If you are in the wilderness and plan to make camp somewhere, consider taking a smaller day bag for foraging as well. Some bags also come with a hydration bladder.

If you have children, you should have a combined bag for those who are too young to carry their own or should combine it with your own. Children old enough to carry a small backpack should each have one allocated to them. Each child's bag should have an ID tag in case they are lost during an emergency so that their parents can be contacted. Keep things like your water bottle, medical aid kit, waterproof bag cover or anything you need to reach quickly in the side pockets where it is easily accessible.

- Wisdom
  Should you not want to be found in the wilderness, if you are looking to hunt or stay concealed, avoid anything that has embellishments that do not add structural support to the bag (these also add weight). Reflective gear, shiny parts, bright colours, patches and solid colours can be seen from far away. If it cannot be avoided, try to dull it out with fabric or tape in a natural colour or dirt.

Packing a bug out bag

Bug out bag Clothing contents:

Remember that in an emergency such as a house fire you may not have time to change and might have to simply grab your 'bug out bag' and get out of your house as fast as you can. This scenario also applies to other disasters. Your emergency bag should contain all of your most important possessions. These things should not be removed unless they are immediately replaced with something else.

I suggest packing some clothing even if it's just a pair of shoes and a waterproof jacket. It is wise to have insect repellent clothing as well as something waterproof and warm in your bag. First prize is to have a full set of light weight, waterproof clothing and shoes.

You can pack some old things that you no longer use in your bug out bag, but ensure that they fit comfortably, are durable and preferably in colours that match your environment. Beware of camouflage clothing as you could appear to be part of a military organisation and could be seen as a potential threat. Opt for roomy clothes rather than tight fitting as they may chafe unless you have a tighter fitting inner layer of thermals.

Where you will be in cold weather, in order to keep warm, you should have a core, second, third and outer layer as discussed below;

Core layer: Your core layer is right on your skin and should be able to remove or wick perspiration from the skin surface. This layer should be kept clean. Good fabrics for a core layer include merino wool, polypropylene or polyester or anything that dries fast. It should

be close fitting but should not chafe or constrict. You could consider keeping these items short sleeved depending on the temperatures you will face.

Second layer: A loose fitting layer that covers your neck and wrists where major blood vessels are found. A polo neck top or a collar shirt is a great option here. Merino wool makes a wonderful second or third layer too depending on climate.

Third layer: In cold conditions having a woollen jumper or fleece third layer will help to trap heat and insulate you. It is also easy to remove this layer if you start feeling too hot. This can also be an outer layer in more temperate region. I would not recommend that you omit the outer layer but rather stow it in your bag. Having a woollen layer is wise as wool smoulders rather than burns and has great insulating properties.

Outer layer: Ideally this should include a waterproof jacket with a hood. In the very least your jacket should be wind proof and your trousers should be made of a fabric that dries quickly. If your jacket is not waterproof, keep a waterproof shell with you like a poncho, you can get cheap ones from a pharmacy.

- Wisdom
  Add a layer of clothing before you start feeling cold as your body expends a lot more energy trying to warm up once it has lost heat than it does trying to maintain your temperature. If you are on the move and take a break, think about adding a layer of clothing while you rest and removing it again when you go on the move. Remove clothing if it gets wet in order to let it dry before replacing it. This is especially important with socks and shoes as you may develop trench foot from wearing wet socks for extended periods of time. Remember that any injury or ailment will slow you down.

Bug out bag clothing contents

	Long trousers. At least one set, made of durable fabric that dries easily. Preferably with pockets that clip, or zip closed.
	Thermal trousers/ tights/ these could double as a layer to sleep in but are optional and can be shorts.
	Belt. A leather belt or even a nylon adjustable length belt can be used as a tie down or to help you build a shelter.
	Shirt, minimum one short and one long sleeve in a durable fabric, collars preferable to protect your neck from the sun or wind.
	Nylon or Polyester under layer shirt and shorts - can be used to sleep in as well
	Jacket, preferably one that you would be able to last through a cold night in. Some jackets have a removable fleece inner and waterproof rip-stop fabric outer which is ideal. A jacket should have a collar or hood to protect your head and neck and decent sized pockets to warm your hands.
	Wool jumper, this is excellent for layering when it's cold.
	Outer waterproof shell or poncho if your jacket is not waterproof, consider that any reflective embellishments, shiny materials or bright colours will attract attention this also applies to plastic ponchos.
	Underwear, ideally comfortable to walk long distances in, minimum two pairs in a polyester or polypropylene fabric.
	Socks, minimum two pairs, preferably four pairs as you may have to wear two pairs at a time if you have an injury or find yourself in cold weather. Some hiking socks are made with varied thickness soles to protect parts of your feet that chafe easily.
	Hat, one with a wide rim is best to protect your neck. In windy areas it is advisable to get one with a chin strap.
	Buff/Scarf to protect your neck and face. Essential in a fire as it may prevent you from inhaling smoke if dampened with a bit of water but can also be used to make char cloth for a fire kit.
	Durable shoes like hiking boots. You should have worn these in already. Waterproof or water-resistant hiking boots that protect your ankles with a rubber sole are ideal. Trainers may be comfortable, but you will be surprised how fast they wear through. Trail running shoes also lack durability in extreme terrain over long periods of time and don't protect your ankles. Keep a pair of open shoes and a pair of closed hiking shoes.
	Shorts in a durable fabric that dries easily with at least one pocket.
	Gloves.
	Hair ties if you have long hair.

Essentials

Omit anything that weighs more than it is worth carrying and you could really survive without, especially over long distances. We are all fond of creature comforts but in an emergency, extras such as toiletries can become an unnecessary burden and can often be substituted with things from your environment.

- Wisdom

Remember during a disaster or when in the wilderness you may be faced with the scenario where you must carry everything you need. Hikers will know this well, take only what you really need. Any extra weight can seem like an extreme burden after a couple of kilometres. Anything that is bulky, ungainly or simply hard to carry will slow you down and hinder you, possibly endangering your life.

Essentials to carry if you have the opportunity, include a water bottle (stainless steel can be used to boil water on the fire), ferrocerium rod, knife, first aid kit and compact sewing kit. I will recommend some contents below. It also includes any medication that you are dependent on such as cardiac, diabetic, allergic or asthmatic treatments stowed in a waterproof container or zip-seal bag. You should consider whether you will have enough to last for the time that you think you may be in the outdoors. Having said that, always pack for longer than you plan to be away and think of possible ways to replenish your medical supply. You will need to decide what you consider essential and whether you are willing to carry it.

If you are going to be isolated for long periods of time, there are other items you will need. Iodized table salt ensures that your thyroid functions correctly and can help to replenish electrolytes when dehydrated. In coastal regions one could get iodine from some shellfish or seaweed, but it is hard to substitute this when inland. Something else to consider, in the case of an economic collapse, you may not have use of usual currency and need to revert to trading for essentials in other ways such as precious raw materials or bartering.

- Wisdom
  When travelling in groups some things can be split between people so that not every person carries every item on this list. Consider that in a time of war, flood or fire, groups of people may be split up. Do not let one person carry all of one type of essential. Should you for any reason be separated from a group, ensure that you have every basic item that you need to survive on your own, e.g. knife, water bottle, mylar blanket, ferrocerium rod.

Other things to pack include a mylar blanket as an inexpensive way to stay warm, however beware of the metallic sheen of it as it may attract unwanted attention and may allow for condensation on the inside. Oven cooking bags are light weight and can be used to boil water over an open fire. Zip-seal bags will help you store things and keep them dry. Rather than taking a pillow and mattress, one can easily be fashioned by stuffing an empty pillowcase or a spare shirt with other items or by fashioning a bed from grass. Alternatively sleep with your head on your bag.

Essentials

	Water bottle. A lightweight stainless steel one can be used to boil water in, ideally a canteen/cup combination.
	Small pot, aluminium or stainless steel is lightweight and durable. This will allow you to collect and boil water, cook food and doubles as an implement for digging in the absence of a shovel.
	Iodized table salt in a waterproof container.
	Currency/ precious metals/ tradeable goods.
	Identification, Passports, permits including those of dependents or pets, other travel or important documents.
	Mylar blanket.
	Ferrocerium rod and a lighter. Keep one of the two on your person.
	Pocket knife/multi-tool. It's a good idea to have two knives with 90degree spines for making fire.
	Compass.
	Map and knowledge of the area.
	Water purification tablets or other purification products.
	Small camping towel.
	Pencil.
	Paper.
	Sunblock.

	Small light weight universal solar charger with connections for any electronic equipment you choose to carry.
	Oven cooking bag and plastic Ziploc bags

Don't underestimate the effect that the sun has on our health; how quickly you dehydrate in the sun and the danger of sunburn. Severe sunburn is extremely dangerous and therefore you should avoid the sun always covering your skin with long sleeve clothes and a decent hat. If you can pack sunblock then do so, it is the only toiletry that I would certainly recommend that you pack. For extended periods in the wilderness, you won't be able to replenish toiletries when they run out, but packing sunblock is imperative. You could also use mud or dirt to cover your skin if you run out of sunblock. Having said that, it is useful to have some form of soap to wash your inner layer of clothes, but there are also alternatives to soap in the bush.

Learning how to identify stones that can be used to make fire when striking a high carbon steel knife or steel striker against them is a useful skill in making fire.

Pharmacies sell first aid kits that already contain most items. Some cars also come with a basic first aid kit. Those are good examples to go by, but if you are simply going to use a shop bought one, you should carefully consider and supplement its contents to ensure that you have everything you need.

Basic First Aid Kit Contents

	Burn shield or similar burn wound dressing.
	Bandages including Israeli bandage. Keep two different sizes.
	Plasters for treatment of blisters, cuts and grazes.
	A good antiseptic ointment, iodine based is great.
	Safety pins.
	Hypodermic needles.
	Mylar blanket.
	Alcohol based wipes.
	Disinfectant liquid like Dettol or Savlon.
	Gauze swabs and cotton wool wiping pads.
	Thick packing swabs to staunch bleeding.
	Windlass tourniquet x2
	Merthiolate or Mercurochrome.
	Antihistamine salve (topical) and tablets.
	Any chronic medication prescribed to you.
	Paracetamol.
	Sharp scissors.
	Elastic adhesive bandage.
	Mouth piece for CPR.
	Ibuprofen.
	Anti-emetic tablets.
	Anti-diarrhoeal tablets.
	Aspirin.
	Sterile scalpel blade
	Latex gloves.
A waterproof container to stow medical essentials in.	

Basic first aid notes

Do not apply toothpaste or any other substances to burns or wounds as this can cause them to become infected and is ineffective for treating wounds. Do not try to suck out any venom or other material from a bite wound. Burns or bites should be rinsed repeatedly with clean boiled water that has been allowed to cool. You can use a mild antiseptic cleanser like Dettol or Savlon to clean the area around a wound. Do not touch the wound with your hands or aggravate it as this may transfer

bacteria to the exposed tissue. Try to gently scrub out any dirt from grazes and superficial cuts with an antiseptic liquid. A little bit of bleeding should help to clear a small wound, but it should be allowed to coagulate and form a scab thereafter. I would highly recommend attending a first aid course to ensure that in an emergency there is at least one person in a group who has knowledge of basic principles of emergency care and CPR.

- Wisdom
  Caution should be taken when sharing medications especially antibiotics as this can cause resistant strains of bacteria to emerge. Consideration should be taken of medications interacting with each other. For prescription medication keep the package insert with you.

Compact sewing kit essentials

A compact sewing kit is necessary in order to be able to repair tents or clothing. This should be done promptly to prevent further damage to the fabric.

- Wisdom
  Keep your sewing kit near your emergency medical kit.

Sewing Kit Contents

	Two needles of different sizes.
	Thread, preferably a thick durable type.
	Buttons as these can help to close tents or clothing.
	Safety pins.
	Sharp scissors can be omitted if kept in the medical aid kit which is advisable.

Equipment

Every day equipment may seem mundane but could make an enormous difference in an effort to survive. A plastic shopping bag is immensely valuable to catch dew/water overnight in areas where water is otherwise hard to come by. This also applies to cooking implements, equipment to build a shelter and find other resources as well as rescue equipment. Some may find these items less essential but very useful none the less. Try to keep items stowed away in waterproof containers or bags that are also lightweight.

- Wisdom
  Keep items light and easy to contain in your bag. Use things that can double as other items like your canteen/cup combination acts as a small pot to cook food in and also doubles as a bowl. Try to pack a spork instead of a separate spoon and fork. Use your pocketknife to cut food rather than pack a separate cutlery knife. Avoid the temptation to pack hi-tec outdoor gear that is heavy to carry and unnecessary if you are going to travel far on foot.

	Plastic packet
	A full tang fixed blade style knife. Preferably one that has a partially serrated edge and possibly spaces in the handle to attach string or rope to. Use a piece of wood to baton on the back of the blade if you do not have an axe.
	Fishing line and hooks with sinkers and swivels.
	Paracord (a thick rope and a separate piece of thin rope helps build shelter).
	Carabiner/Cable ties/Re-usable flexi ties.
	Glow stick.
	Groundsheet or tarp can double as a bivy bag/shelter roof/tent.
	Headlamp with rechargeable batteries.
	Spork/cutlery.
	Collapsible spade, preferably with one serrated edge.
	Walking stick for extended walking distances (optional).
	List of natural edibles in the area and distinguishing factors.
	Binoculars.

	Thin wire.
	Pocket saw/wire saw.
	Water resistant sleeping bag.
	Small pop-up tent in natural colours or a camping hammock with mosquito nets (optional).
	Small mirror to communicate/attract attention from rescue party.
	Compact tool kit or multi-tool with most implements.
	Compact nail kit with sharp nail scissors, tweezers and a blade – can be kept with medical aid kit to treat injuries.

- Wisdom
  There are ways to sharpen a blade in the wilderness. Using natural stone, crushed quartz or sand on a wet surface you can sharpen a blade drawn across it instead of packing a blade sharpener. Try not to carry or pack things that can be substituted otherwise, if you have to, take a pocket-sized sharpening stone.

Gear and Gadgets

These are non-essential items that can be carried with relative ease when travelling in a vehicle or when travelling in a group on foot as some of these items can be split between people. Try to keep these compact and don't take anything you may only need for comfort if you are going on foot. When travelling in a vehicle it is easier to stow extra items in the cargo hold which allows you to take more gear. Remember that anything you do to see animals that you are hunting, or to attract the attention of other people, can be used to find your location. The glare off of binocular lenses for example could attract unwanted attention. Any noise you make or spoor you leave can be used to track you. Gadgets are great but technology used to locate your GPS coordinates may possibly be used to track you. Take note this section speaks to your best-case scenario in the worst circumstances.

- Wisdom
  Consider these items the ones that you would abandon should you have to go on foot or leave your vehicle. Prepare yourself to leave some things behind if you really need to. Also be careful not to leave a trail of items unless you want to be followed. In some instances, items can be buried or hidden for later retrieval if you think you will be able to find them again and know that you will return the way you came.

	Gas stove, consider keeping a big gas canister in a vehicle and a small back-up one for mobility.
	Accessibility tools such as a pair of screwdrivers or a bolt cutter.
	Hunting equipment: rifle, slingshot, bow and arrows, crossbow.
	Satellite phone and solar or other charger.
	Flood light.
	Vehicle recovery gear.
	Large spade.
	Pick axe.
	40L Jerry cans of water if travelling by vehicle.
	20L Jerry cans of fuel if travelling by vehicle.
	Roll up mats.
	Two-way radios
	Camouflage netting.
	Larger axe.
	Free diving gear, wet suit/mask/fins/spear/gloves, booties.
	Mosquito net.
	Universal solar charger.

- Wisdom
  Always take the worst-case scenario into consideration.

Firearms

I am adding this section due to the fact that we live in uncertain times. For those who carry firearms, keep them readily accessible while always keeping in mind the legal prerequisites for their storage. Also consider that carrying a lot of ammunition on foot can be very heavy so keep any ammo boxes lightweight and compact. Take only what you need.

- Wisdom
  It goes without saying that any noise you make can alert people as well as animals to your location. That includes the location of anyone who is travelling with you and also applies to the noise they make.

Principals of Survival

Know your surroundings

Being familiar with the lay of the land around you, the wildlife in it and the resources could save your life. Often a quick survey of the area can be done from high ground. If you need to climb a tree, be weary of what other creatures may be in it, where you put your hands and which path you follow. Consider if you climb up or down any terrain, how you could possibly return, to avoid getting stuck. Try to find one visible landmark in the distance and keep it in sight as you travel. This will help you not to travel in circles. Note with a pencil and paper your landmarks as you go or make notes on a map. This is especially important when noting where you found resources such as food, water and shelter or wild animals. It is helpful to have a compass, but circumstances don't always allow us the luxury so knowledge on how to navigate without one is essential.

If you have the opportunity to plan your route beforehand, note mountain ranges, roads (especially the well-travelled ones) as well as what food sources you could forage from the environment.

The animals and predators or natural dangers such as snakes or poisonous creatures could pose a huge threat to you and should not be underestimated. Snakes can often strike twice their own length so give them a wide berth or approach carefully if you are hunting them. Some of these can be warded off by making a noise or using heavy footfall. In the case of some Berg Adders or Puff Adders, they are lazy and may not move away from you. Be sure to keep an eye on where you step as they may not lie directly in your line of sight but slightly hidden in the edge of the grass.

- Wisdom
  Take extra care as anything that causes you to fall ill or be injured could cost you your life in a survival situation as resources may be limited and medical treatment not near at hand. Prevention is better than cure.

Risky behaviour should be avoided if possible. Do not eat anything unless you are positive about its edibility, and it is worth the nutrients. That eliminates most fungi and a lot of plants. Remember that to digest food you need water and calories. If you eat something that has a low caloric value, you will burn calories digesting it but not gain many nutrients. You will also lose water. Protein digestion uses the most water. Don't behave recklessly as any noise may startle potential animals you could hunt or could alert predators/enemies to your position.

Protection and fire

It is imperative to seek protection or shelter of some sort at least two hours before nightfall. This may come in the most basic form of a thorn hedge (kraal) that you build yourself, a crude roofed shelter or a cave. Be wary of talus caves where the rock formation may move and trap or falling rocks that could injure you. Sea caves may flood. Be sure that the cave you choose to make shelter in is not filled with bat guano as these carry viruses that will make you very ill. Cleaning the cave of guano is not a viable option, rather choose another shelter. Be wary of snakes and other creatures that may look for heat and could creep into your shelter with you or prior inhabitants of that area like bats, ants, scorpions, spiders and predators. If you are going to remove your shoes, be sure to check that no scorpions have crawled into them before putting them back on or store shoes upside down on poles stuck in the ground.

It is no wonder that man has been fascinated with fire for centuries. It is one of our greatest resources as well as one of the most dangerous threats to life. Make a practice of always carrying a ferrocerium

rod and a knife with you when in the bush. Having one or two other options to make fire like a lighter, steel striker and flint and waterproof matches is wise. A fire will help you stay warm, cook food, boil water and keep predators away. Practice making fire with ferrocerium rod, there is a little bit of technique to it but once you can easily start a fire with ferrocerium rod it will be one of your most valuable skills. Don't wait until you are in a survival situation to try it for the first time. Also consider learning how to make fire with a bow drill in case you find yourself without a ferrocerium rod.

Remember that fire is a good deterrent for wild animals at night but could also alert anyone to your position. A hot cooked meal is a great comfort in the wilderness, but the smell and sight of a cooking fire could also lure predators and unwelcome visitors.

- Wisdom
  The light from a campfire also not only reveals your position but can blind you to anything in the dark outside the fire's ring of light. Having a torch nearby just in case is great but remember illuminating anything around you will also give away your own position to predators or enemies as well as hamper your night vision for a while after you switch the light off.

If you have made a fire, you can carry it with you when you move. By keeping some of the embers burning in a small tin. The embers will keep for a few hours to days depending on the material used. Place dry grass or moss below and above the embers in the tin. Attach a string to two sides of the tin to make a sling handle to carry the tin. Make it long enough to keep it away from your body so that you do not burn. Always be weary of starting a bush or veld fire when you make one.

You can attempt to hide the smoke from a fire in a few ways. Firstly, if it is necessary that you start a fire, try to do so near a tree but not directly underneath it. This will obscure the view of the smoke but be sure that the tree doesn't catch alight. Make a fire from very dry material to minimise smoke. Secondly, build a Dakota fire. This is done by digging a hole about a foot into the ground. The top of the hole should be slightly narrower than your cooking pot so that your pot can rest over the hole, and the bottom of your hole can be a little wider. You will make the fire at the bottom of this hole. A few feet away from your original hole, burrow into the ground at an angle towards the bottom of your original hole, preferably downwind so that the wind blows into your burrow towards the bottom of your original hole where the fire will be. You can stoke your fire through the burrow. Be careful of root running fires that cause the roots of plants to catch a light underground and start veld fires.

- Wisdom
  If possible don't sleep where you have cooked a meal, even if that means travelling a couple more kilometres after you have cooked your meal or making shelter then moving away from it to cook before returning. Also be careful not to leave any food/left over parts of your meal out near your shelter. If you have hunted anything, do not leave any blood or tissue out around your shelter as the smell will lure predators from far away. That applies to wound dressings as well. Predators may continue to follow you for days in the hope of sustenance and may attack you.

Setting up camp takes careful consideration. Not only does left over food lure predators but water does too. If you are near a river/lake you can be sure there will be activity near your camp at night.

When choosing an area to camp, note the lay of the land and whether there are any animal tracks around. Should there be any rain during the night you would not want to be in the path of a sudden flood or even just the dripping or streaming of water from plants or the soil. Don't camp in riverbeds, on the inner bends of a river that is likely to flood, or where water could flow down a slope over your camp. Carefully note where it looks like there has been water before and avoid these areas. Create your shelter opening downhill and downwind.

If at all possible, try to lift your bed/camp off the floor as this will keep you out of the way of most creeping insects and animals. This is imperative in the jungle. This will also help to keep you dry. If you manage to make a fire, you could put some rocks into the fire and once they are hot bury them in the ground or place them underneath or beside your shelter to create a heated platform beneath where you sleep. Again, beware of root running fires. This will conserve energy that your body would otherwise burn to maintain temperature. Check for tracks around your camp site first thing in the morning and be careful of anything that could follow you. Note the shape, crispness, details, spacing and direction of tracks as this might alert you to a stalking predator.

If you have a weapon or firearm keep it close at hand or easy to reach at all times and always be ready to get up and go or to defend yourself even in the middle of the night.

Rescue / Remaining undetected

Hoping to be rescued and working to stay hidden are juxtaposition scenarios. What goes for the one is in opposition to the other.

Special Forces and other operatives tend to only move at night as it is harder for any enemy to spot their movements. This option of covering terrain however poses some dangers to the average layman. If you are moving at night, try to wait until about an hour after dark without lighting any fires. This will help your eyes to adjust to the dark and your night vision will improve. Be wary of holes in the ground or ravines where the terrain suddenly drops away. Be careful of where you step and continuously scan your surroundings for any movement or sounds. Most people sleep deepest around 3am in the morning. This is when human activity is usually at its lowest. In an escape and evade situation this is the best time for you to move. You will also notice that a lot of home burglaries happen around this time for the same reason.

Remember nocturnal predators are usually well adapted to see, hear and smell much better than humans. If you are in a group, set up a watch schedule. Taking turns to guard the camp, each person doing a few hours at a time or keeping guard in pairs and alternating turns to rest, this could alert your camp to imminent danger.

- Wisdom
  Do not underestimate nocturnal predators and always suspect that you are being watched even in urban areas. This will help you to keep your guard up.

If you want to be rescued it is good to keep in mind that if you follow a downward slope, you will usually find a river. If you follow a river, it will usually lead you to a road or civilisation. Conversely, if you want to remain undetected, avoid spending time near rivers and water sources. Keep in mind when moving around and when in hiding that it is most likely that anything you see can also see you. Therefore, stay off the horizon when covering ground, stick to shadows and avoid open plains.

If a predator is following you, it may help to find a river and to travel downstream in shallow water for a while as this may mask your scent and keep you from leaving tracks. Consider what predators you will find in the river as well such as crocodiles, snakes and leeches. Water carries parasites and has its own dangers, but if you are really in a dire situation, it may also save your life. Be very weary of entering water though especially a strong current as getting swept away may result in drowning.

Water

When you do your initial survey of the land, try to spot any riverbeds, areas of dense green growth or other evidence of water or where water used to be. It would be wise to make finding water a high priority as dehydration is one of the biggest threats on your life. If you find a dry riverbed you can dig down into it to find the water table.

If you do not find water, use a plastic bag or similar fabric to catch any rainwater or dew. You can also collect water through condensation by building a solar still, but this usually uses a lot of energy and doesn't yield a lot of water. Water will collect inside a sheet of plastic if the plastic is positioned to cover a hole in the ground that gets good sunlight. The air inside the hole will heat up and moisture will form on the plastic. Weigh it down in the middle and position over a cup. Dig a new still if no more condensation occurs.

Using transpiration is an important addition to any other skills in finding water. In fact, it yields quite a lot of water and if you have plants around, you might be able to rely solely on this method if you have enough clear plastic. It's better than digging a solar still because you expend less energy. Realistically when in a survival situation you may need to use more than one method to collect water. Knowing how to do a poison test on plants is very important and you should avoid poisonous plants as even a little bit of a toxic substance can do you a lot of harm. If in doubt, do your poison test for poisonous plants on the water you have collected before drinking the whole lot of it. Water is a natural by-product of photosynthesis and essentially evaporated water from the leaves is pure. So unless the

plant is poisonous, as poisonous pollen and sap can end up in the water, you should have drinkable water in the plastic bag. Bearing in mind that you need to give the branch a once over and a bit of dusting beforehand to ensure that most of the bird dropping-covered leaves and bugs have been removed. I imagine putting a mylar or space blanket in the bottom of the bag will speed up the process as this increases the heat, but you need to be sure the plant isn't toxic. Birch, Maple, Wattle, Oak and some Acacias can be used, and Pine is not ideal. You will probably get more water from the broader leafed and succulent plant type. Be sure to move the plastic bag on to the next branch after tapping the first yield, as the increased humidity in the bag will slow down the plant's rate of replenishment to those leaves, potentially harming the plant and yielding less water for you.

Always try to filter water through a fine cloth and then boil it for at least one minute before drinking it or using to treat wounds and take some with you when you move again. Water can be boiled in a plastic bag over a fire or by putting stones in a fire until they are hot and them adding them into whatever container you have. The hot stones will boil the water. Stay away from stagnant water. Potassium permanganate tablets have been used for water purification as well as the treatment of some bacterial and fungal infections or as topical treatment for oozing wounds, but these days there are many other different kinds of water purification products available to us.

- Wisdom
  Water purification tablets or even a water purification bottle are good to keep in your bug out bag in case you do not have the option to boil water.

If you know some of the edible plants in your environment you may be able to gain moisture from eating bulbs, fruits or roots. Bees, flies and wasps are a good indication that there is water within about 5km from you as they don't nest far from water.

Don't eat ice in order to ingest water. Your body will use a lot of energy trying to maintain your core temperature after ingesting ice. Rather contain the ice and melt it over a fire or wait for it to melt by itself.

Should you find water trickling over a rock if can be collected using a string or some grass. Often water that seeps out of rocks is drinkable as it is filtered by the rocks/soil. Take care not to assume that water is drinkable because it is flowing, or you see an animal drinking from it. It should be noted that even animals also get sick from drinking infected water in some instances.

Food

Even though you could survive without food for a couple of days, not being able to eat is going to weaken you. In any circumstance where you are planning to cover terrain, you should try to stay nourished as well as hydrated. You never know when you will need to exert yourself, and not eating could put you in a bad position when you require the energy to keep moving.

Avoid storing wet food in your bug out bag, this applies to biltong too, it will spoil faster than you think. It is also heavy to carry. Anything that contains water and is not dehydrated, or emergency food rations is extra weight. It is however advisable to keep nutrition of some sort that is unlikely to spoil in your bag. Try to choose something with protein and carbohydrates like dehydrated emergency rations. Keep containers of any sort lightweight, plastic, aluminium, multifunctional and avoid glass as it's heavy could break, injure you and rip essential waterproof items.

- Wisdom
  Keep some iodized table salt in your bug out bag. This can be used for wound care as well as to replace electrolytes. The iodine in iodized table salt also helps to ensure proper thyroid function.

Insects are often high in protein and fruits/plants can be high in carbohydrates and sugars that will keep you going. Researching the edibles in your environment will go a long way in keeping you vital. It may help you to know that closed pinecones release their pine nuts when exposed to fire. Pine nuts are full of fats, calories and minerals such as zinc and iron, vitamin E and protein. Pine needles are high in Vitamins A and C and can prevent scurvy if boiled with your drinking water to make pine needle tea. Likewise, some edible seaweeds also contain vitamins and minerals like vitamin B-12, Iron, magnesium, calcium, potassium and iodine supporting thyroid and neuromuscular function.

Being able to eat will also assist your body in temperature regulation when it is cold. If you have good knowledge of roots or fruits of the area you may be able to forage them for food. Mushrooms are not high in nutrients and confusing them could be deadly. It should be noted that eating as much as half a poisonous Amanita Phalloides (Death Cap) mushroom can kill an adult and for some kinds of poisonous mushroom there is no proven antidote but rather symptomatic treatment. Only eat them if you have good knowledge and are certain that it would benefit you.

Below are a couple of tests to see if something is edible:

Stay away from anything that has an almond or apricot smell. Any mushrooms that bruise bright yellow and remain bruised yellow are usually part of the 'lose your lunch' bunch. Mushrooms don't have a lot of nutrients and I wouldn't recommend experimenting with or eating them in a survival situation.

Rub a small amount of the juice of a plant on the inside of your arm, a rash or stinging/burning sensation could tell you it is poisonous.

Test a small piece by placing it on your lip or tongue. If it doesn't cause numbness or a strange taste or sensation after twenty minutes, consider taking a small bite and waiting six hours to see if you have a reaction to it, taking care not to eat anything else in that time.

If you find the spoor of a small animal or bird that covers the ground, they can sometimes be caught in a snare or trap. One such a catch every couple of days may be lifesaving. Consider how the animals in that environment stay nourished. We currently live in a fast and easy society; everything is close at hand. But in nature, finding food takes patience. For carnivorous predators, finding food can often take days. Some birds and grazing animals feed all day to stay nourished. Don't be dismayed if it takes a while to find or catch something to eat.

- Wisdom
  Take the time to research the edible plants and easy to catch insects and animals in your environment, how to prepare those foods and which parts to eat should you find yourself in an emergency situation. Scorpions can be eaten if the stinger is removed and the scorpion is cooked over a fire.

Hunting is easier said than done if you don't have the right equipment. Consider keeping a slingshot, bow and arrow or even a crossbow on hand in order to make hunting easier. These can double as weapons of self-defence. If you fail to hunt once, keep trying. The same can be said for making a fire. Be patient when trying and use fuels that are dry or high in natural oils such as fynbos or pine. The best advice is to gain the skills beforehand. Cook meat whenever you can as it is easier to digest and doesn't take unnecessary energy from your body. This will also remove most bacteria from the food. Keep an eye out for easy to reach nests as eggs could help you in an emergency.

You can use vinegar and salts to cure and preserve meat. Make a practice of trying different ways to preserve meat and become self-reliant in this. Remember that carrying meat with you may attract predators though.

Unfortunately, humans are not able to digest vegetation in the same manner that ruminant animals do. They have a specialised digestive system that allows them to ferment their food thereby also drawing out nutrients. For this reason, humans aren't able to use all vegetation as a source for energy. Some foods will require a large amount of energy to be digested and don't provide much nutrition. Avoid these foods unless you can derive water from them. An example would be leafy greens or mushrooms.

Do not store food in your camp. You can suspend it from a tree using a rope about 1m away from the trunk and 3m up. Choose a tree at least 50m to 100m away from your shelter and keep in mind any animals drawn to the smell will possibly pass right by your shelter so keep an eye out for game trails.

Rest

It goes without saying that at some point you will need to rest. Our bodies need to heal, and our minds also need to be revitalised. A good night's rest can do wonders for morale. Consider that in a scenario where you are running on adrenalin you may not realise how fatigued you really are. Try to be reasonable and allow yourself to rest just enough to keep going again later. It is important not to

stagnate if you are lost as this can be a time for despair to set in, but if possible, try to stop for a few hours once in a 24hour cycle and take the time to re-think and plan your route.

- If you are feeling demotivated after a hard day of travelling, as in our everyday lives, it might be time to rest, take a break and get some good quality sleep. Things always look brighter in the morning.

Retain hope

In order to keep your mind occupied, set a couple of goals for yourself. What are your priorities? Repeat those to yourself when you feel you are dispirited - and act on them. Ensure that you get enough rest but try to keep going as stagnation can cause us to become less active and less pragmatic, wallowing in our emotions.

Earlier I mentioned that staying hidden and hoping to be rescued are juxtaposition scenarios. This is an important notion to keep in mind in order not to lose hope. Consider that there may have been someone in your situation who was hoping for the opposite of what you are hoping for in your exact environment. Mind over matter might save your life.

Here is an example; wherever you are, if you are trying to be rescued, there may have been people living off the land and trying to stay hidden there before. It is therefore unlikely that you are in a completely hopeless situation as others have survived where you are, albeit with different intentions, and that, in the very same environment you find yourself in. Think about how they would have lived.

- Wisdom
  When trying to stay undetected, consider the things someone who wants to be found would do, and do the opposite.

Humans are made to be in companionship with one another. Despair sets in quickly when we are isolated. This can cause us to lose hope. If you are alone and you lose hope, you will have a much harder time achieving your goals. Remember that you are only alone in your current environment. Don't displace yourself from society in your mind and remember that God gave human beings dominion over the earth and its creatures.

Imminent dangers in the wilderness

These go hand in hand with the principles of survival. In the wilderness a lack of consideration of any of the below elements poses a serious threat to your chances of survival.

A danger to yourself

Some things to consider when you are looking to be rescued: If you are stranded or lost, it may only be a couple of hours or days before you are found. But hoping to be rescued shortly might keep you from making decisions that ensure your longevity. Consider what would happen if you are not found soon and make plans as you go in order to survive in the long run. For example, ensure that you find shelter, water, food, hunt or forage and make sure that you can keep it up in case you need to.

Don't discard anything that you may be able to use again, like rope, equipment and clothing and keep arrows or other ammunition that can be re-used. When you see that the sun will set within two hours, try to find shelter, water and food instead of pressing on until it is dark in the hope of being found. This will weaken you and consequently reduce your chances of surviving. Every day, you should find water, food and shelter. Start every day by making plans for the day and implementing them. In short, make decisions wisely and thoughtfully, avoid the urge to act impulsively or to panic.

- Wisdom
  Stay busy working to be rescued or finding other people, but don't expend energy unnecessarily and try to keep everything you do sustainable.

If you are evading a threat, you will probably be one of the biggest risks to yourself remaining undetected. In this case there is very little margin for error. Consider that everything you do may possibly leave a trail to follow. Anyone you can see, will possibly see you too. Anything you can hear, including yourself, could also be heard by others. Your advantage will be to carefully consider

everything you do and plan every movement. In trying to avoid detection you should consider what your followers or those searching for you would be looking for in order to track you down and avoid leaving those signs or indicators for them to follow. Consider the spoor you leave when walking in the dirt. The rocks or plants you overturn and branches that you leave broken or the grass that looks trodden or slept on. Any equipment that you use may also be visible. A shiny part or glare from an object that you carry can be seen for miles and the same goes for the noises you make.

- Wisdom
  If you were trying to track someone down or follow them, what would give them away? Avoid making the same mistakes.

Predators

Should you be hiding from or trying to avoid predators there is another factor to consider. Predators often have a very keen sense of smell, and your scent stays on everything you touch, every branch, grass leaf and patch of dirt and is carried by the wind. Big cats, hyenas, bears (in countries where they are found) and other carnivorous animals can pick up scents as well as follow them for exceptionally long distances.

Staying downwind of a predator you want to avoid and travelling in water are some things that you could consider if one is following you, but you would also need to notice the other presence fast and move away at a fast pace for an extended distance without ever dropping your guard. If you fail, consider turning to defend yourself by setting a well-designed trap with a backup plan to fight the predator. This should be your last resort.

- Wisdom
  Humans have one undisputed advantage over everything in their environment, intelligence. Use wit to outthink your adversaries. God gave humans dominion over the earth and its creatures Therefore you are the authority in the wild as was demonstrated by primitive man who was able to overcome challenges in wilderness.

A predator may follow you for days if they are hunting you. You may not even know it. Check for spoor and note sounds around you. Even the lack of sound. Often if there is a predator or a person in one area of the bush, you will find that the birds in that area are either excessively noisy or that they will fly away.

If you enter an area and the birds suddenly take flight, you are likely the only person or predator in that area. Conversely, if you are stationary and the birds around you suddenly take flight, another predator has possibly entered the area. Remember that some of the animals in your environment will consider you a predator too. Think about how you fit into that biosphere.

Extreme temperatures

It is easy to underestimate how quickly a person dehydrates and weakens in excessive heat. If you are merely a little thirsty you are already starting to dehydrate. Do not delay in finding water, you cannot survive without it for more than a few days and will likely need to be strong enough to boil it before it is drinkable. Keep surfaces like your head and neck well covered in the sun and try to avoid travelling during the hottest time of day if you do not have any shade. Heatstroke is very dangerous and can cause you to become delirious. This confusion could get you lost in the wilderness. If you cannot find shelter from the heat, try to make one by digging down in to the ground and using some of the debris like logs, branches and leaves. Often you will strike a water table this way and find water at the same time.

In extreme cold conditions hypothermia is to be avoided at every cost. If you find that you are even slightly cold, you need to look for a way to warm up. Cover your head, neck and wrists. Your body expends large amounts of energy trying to bring your body temperature back up to normal if you have lost heat. For this reason, try to stay warm. Stuff your clothes with something from your environment to keep warm. Dig a burrow in the ground if you can, make a hole in the floor of your burrow for the cold air to drop into, leaving the hot air around you to warm you up. Try to stay dry and if you need to get wet attempt to keep your clothes dry by removing some before entering the water. This is important with regards to shoes as wearing wet shoes will result in injury or disease.

Lack of water/resources

With the recent global pandemic, we can see what chaos a lack of resources causes. Besides the threat that fire, pandemic, civil war and floods pose, we are counselled against taking a mark, new technology, that will enable us to buy or sell. Those who heed the warning not to take the mark, will be severely limited in their ability to acquire resources. You would be wise to prepare for such a time by becoming self-reliant, even in your urban home and to stay alert and ready for anything.

Ensure that you have all the equipment you need in the wild. Hunting for food and scouting out water are only a part of searching for resources. Depending on the circumstances, you may need to improvise. If you do not have an axe or machete to cut branches for a shelter, try to break a rock to create a sharp edge. You can hammer a log on another sharp-edged object to cut through tough branches using it to act as an axe. Rocks can also be broken with force or by heating and cooling them very fast. Interestingly some other materials like green branches can be strengthened in this manner, heat them over a fire and allow to cool. Repeat this a couple of times with a sharpened stick and you have a spear.

If you are at a complete loss and have no idea how to come by a resource, try to take a step back and rethink your scenario from a different angle. One, what is it that you need? Two, is there anything in your environment that could act that way under certain circumstances? Three, how will you get that element to act that way?

E.g. if you don't have a compass, you could use a needle, paperclip etc. to act as the needle of a compass by magnetising it with your knife or against silk or even your hair. Float the magnetised needle on a leaf in water, the needle will realign itself to give you a north-south direction. Be careful that your watch, belt buckle, knife etc. don't draw the needle and thereby alter the north-south line. Check which is north or south by the direction of the movement of the sun.

No needle? Use a stick, place it in the ground in the sun and draw a clock around it. Mark the starting point of the tip of the stick's shadow. When the shadow of the stick has moved 15 minutes, mark the tip of the shadow again. Draw a line between your two marks, this will give you a rough West-East line. Bisect the line to give you North-South.

A third way to navigate in the Southern hemisphere is by pointing the 12-o-clock mark of your analogue watch at the sun. Halfway between the hour hand and twelve is the North-South line. Again, check which is North, and which is South by the movement of the sun which sets in the West. This is a rough guide. In the Northern hemisphere, point the hour hand of your watch at the sun, halfway between the hour hand and 12 will be give you the North-South line in the Northern hemisphere.

Remember that you can determine an East-West line by looking at shadows. This is increasingly accurate the further away you move from the equator. Shadows move in the opposite direction to the sun (West to East). The setting sun will cause shadows to move east. At twelve o clock in the day, shadows will tend to point North in the Northern Hemisphere and South in the Southern Hemisphere. This can all be a lot to remember, I recommend experimenting with these methods. This will also commit them to memory.

Trying to keep something cool? Charcoal from the previous night's fire is a good insulator when kept wet. Contain the charcoal in for e.g. a hole in the ground, place your produce in the midst of the closely packed charcoal. Keep the charcoal wet and cover the container it is in. This will create a cooler box. It is best done when the temperature is cool like in the morning as it will keep the cool air locked in during the day. However, be careful not to keep anything near your camp that will lure predators.

Losing hope

Your scenario may be the furthest thing from what you intended or expected. Don't let the shock overwhelm you. Try to think clinically and pragmatically about how to handle your situation and what your options are. If you tend to freeze, try to just think about what your greatest need is in that moment and how to satisfy that need. If you are mildly thirsty, work on finding water. Don't let small setbacks discourage you, if you fail once, keep trying or assess how you could improve your plan in order to ensure success.

Disease, illness and pests

Water borne diseases are only part of the threat of illness in the wilderness. Others to consider are malaria, tick bite fever, rabies and other viral or parasitic infections transmitted to humans from animals, animal faeces or through contaminated water.

Burning of plants to create a smoky haze around a camp has been used for centuries by indigenous people to ward off mosquitoes and other insects. There are various suggestions depending on what you have in your surroundings. Blackjacks, rosemary and citronella grass are commonly burnt or used but some would say their use is ineffective. Smoke has also been used to calm bees to raid beehives for honey, however if you try this you may still get stung a couple of times. Remember, a smoky fire is also a signal for anyone looking for you.

Wearing long sleeve shirts and long pants and avoiding wooded or grassy areas can prevent ticks from coming into contact with your skin. You should do a thorough search for ticks at least once a day, ideally with someone to help you check. Ticks will crawl on your skin to warm places like armpits, groin, scalp and behind your knees so be sure to check these places. They are also naturally repelled by anything that smells like citrus, peppermint, lavender, cinnamon or rose geranium. Remove ticks using tweezers and do not try to squash or burn them. If the mouth is left in the skin, it will usually come out by itself.

When using water for any reason try to stick to clean boiled water. Washing out of wounds or animal bites should be done promptly and repeatedly with clean water that has been boiled for as minimum of one minute and cooled.

Emergency scenarios

Fire/Flood/Earthquake

These are traumatic events that often surprise those who suffer in their wake. Survivors of tsunamis, fires and earthquakes usually have very little warning and almost no time to evacuate. It is likely that you will have some minor injuries in the very least in these scenarios, not necessarily acquired by the event itself, but in the process of trying to escape. Therefore, having a medical kit in your bug out bag is imperative.

I cannot emphasize enough the importance of planning. Think carefully about each scenario and plan what you would do if you were home and suddenly had an emergency call to evacuate. Often people have only seconds to grab their most important things and get out of the way of the threat. It is for this reason that I recommend anything like passports, identification and essentials be stored near each other and possibly all in one waterproof bag near where you sleep.

- Wisdom
  Ask yourself the following questions and discuss with your family: In which directions can I escape the house/building if there is a fire in different places around the room I am in? How will I escape, through a window, a door, the roof? What implements will I use to get through these barriers? What is "plan B" if my initial escape route is blocked? Who do I need to take responsibility for in the house? What will I grab and take with me? Where are these people and things situated? What if there is no electricity and it is dark? What if I cannot get out?

Your bug out bag and essentials need to be stored in a place that you can find and reach them in the dark. Avoid bogging them down with other things stored on top or making access difficult. Often in disasters water and electricity sources will be down and in the middle of the night you should have a plan to get to safety as soon as possible.

To give you an example of a go plan in case of fire.

1. Ensure that you can see if it is dark, switch on a room light, emergency battery operated light, solar light, cell phone light. Remember if the power is still on, it may not stay that way for long so find a mobile light immediately.
2. Cover your mouth with a damp cloth like a buff or scarf to prevent inhaling smoke.
3. Establish where the fire is and how much time you have to get out. If you have 1 minute to get out of the house when you realise there is an emergency, do the following keeping in mind that you have about 10 seconds to complete each task;

4. Move in the opposite direction of the fire while getting a hold of any children, pets or dependents in the room with you.
5. Before you leave a room make sure that you have what you need from that room and everyone is out as you may not be able to return to the room, this is why packing a bug out bag is so important as it reduces the thinking work.
6. Try to grab and take with you or put on a decent pair of shoes and clothes very quickly and to cover your mouth and eyes with goggles and a damp cloth. This is important as trying to escape barefoot, without being able to breathe or in hampering clothing can delay your escape or cause you to be seriously injured.
7. If your children are not in the room, grab your bug out bag from the room you are in, and go look for them, you may not have time to return to any room you were in before, so if you have time, don't leave anything behind that you really need.
8. Take your dependents and move to a designated exit point, try not to panic and shout over one another, your calm voice will help others to think clearly. You should have considered designated exit points prior to any emergency and discussed this with your family and how you may exit through them. Remember, if you keep the keys to the back door at the front of the house which is now on fire, you may have to exit through a window. Consider how this scenario might trap you if you have burglar bars etc.
9. Ensure that everyone is present before you leave a room and that there is nothing that could injure you in the process of exiting like sharp shards of glass left in a window frame or on the ground outside.
10. Once out of the house, try to move away from danger and think about how the fire may move or change direction, then go the opposite way.
11. When you have time, or can no longer move further away from the threat, or are out of harm's way, call for help.

- Wisdom
  Don't underestimate how quickly the elements change. A breeze may change the direction of a fire. The current in a flash flood may suddenly strengthen and carry debris and what seemed like a solid structure may crumble without warning in an earthquake. Don't take your circumstances for granted and always think about how your scenario may change. Be prepared for the worst case and move as far away as possible from danger.

War

In war time families are often split up and communication channels occupied or cut off. Ensure that your family is briefed beforehand on what to do should you suddenly have to flee or become separated. If you live in a country where war is imminent, take the time to talk through some scenarios with your loved ones and to prepare what you would take with you and what to leave if you need to flee.

- Wisdom
  Establishing an information network is crucial during a time of disaster. Communication of some sort will give you foresight to avoid harmful contact and navigate to safety if you are a retreating civilian.

Communication could come simply in the form of a radio or news connection or a word-of-mouth network in your community. Avoid becoming isolated completely unless you have no other choice and seek out others like yourself to build morale and a support network. Be wise as to where you seek information though as panicking people may dramatize or sensationalise information and lead you to believe falsified news.

As a last resort and as has previously happened in countries where civil war has broken out, the economy has collapsed or there has been an ecological disaster, you may have to retreat to a different area from where you normally reside. In the worst-case scenario, you may have to move to a place previously uninhabited. Think about this beforehand. Where could you safely retreat to and what would you need to survive in that environment? How long could you stay there?

Having a plan and hope for a future is a strong driving force and should not be underestimated. Therefore, this kind of planning may seem extremist but can go a long way to help your family steel themselves for what is to come and to survive.

Other considerations

Camouflage

There is more to camouflage than natural colours for concealment. It involves breaking the natural lines and shapes of a person's face, head and body. Human eyes are inclined to spot facial patterns, movement, silhouettes and textures. This means that the natural shape, shine and silhouette of a person's skin and body will trigger a seekers sight and recognition. The same goes for movement and movement patterns. Therefore, if you intend to remain concealed you need to break the pattern of your body and the look of your skin. Stay off the horizon as it makes it easy to pick out part of a person or a human shape. In order to conceal anything, you need to make it look like the environment surrounding it. If the surroundings are grassy, the person or object of concealment needs to be covered in grass at the same angle as that which grows in the environment.

Consider that anything carried on you, including clothing, equipment and gear may have shiny parts, embellishments, labels or unnatural shapes that stand out. If they cannot be avoided, use dirt or cloth to dull them out and break their outline.

Camouflage is also not only used in the outdoors. You may need to remain concealed in an urban environment. This will take a bit of creativity as the human shape is easy to spot amongst the straight lines of furniture and buildings.

Substitutes from your environment

In modern day society it seems unthinkable to go without luxuries such as toiletries or cleaning agents. These are often containers with liquid substances that will be heavy to carry. Anything that is not dehydrated will add extra weight to your load. If you plan a luxury safari by all means take small sample bottles of your toiletries. If you need to carry your supplies, this will quickly become excessive and unnecessary. Especially if those supplies cannot be replenished.

A small amount of research will teach you which plants to use as substitutes for soap (Devils thorn in Northern Cape and North West, Noltea Africana Eastern Cape, KZN, Cape Peninsula, Western Cape, Former Transkei) toothbrushes (from frayed end of a Magic Guarri bush) and how to make the ash from a fire (Leadwood ash works well) into toothpaste. There are many natural remedies in our environment, but we need to take the time to research them. There is no need to carry anything you will not be able to replenish in any case. I have previously recommended sunblock as sunburn can pose a health risk, but even this can be omitted if you wear long clothing or use mud to protect your skin or stay out of the noon day sun. Using mud or wearing long sleeve clothing will also keep insects away.

The leaves of a silver cluster leaf tree can be chewed to treat diarrhoea despite their unpleasant taste and the sap of an aloe has moisturising and antiseptic properties that can be used to treat minor abrasions. Take care not to apply any plant material to deep wounds or serious injuries as there is a risk of infection. In the case of grievous injury, rather seek medical attention.

Survival in groups

Travelling in groups is advantageous as we can rely on each other's strengths. It also requires patience and tolerance as there will always be a person in the group who struggles to cope and will need others to bolster them. Consider the elderly, children and ill people and try to assist them to ensure that the group works as a unit. Don't forget that you have your own weaknesses. Those who are exceptionally strong can support the exceptionally weak in order to even out the status quo of the group and ensure everyone moves at the same pace. If you are the strongest in the group, help the weakest person. Moving in a group also means that duties and items to carry can be split between members to evenly spread the load and responsibilities. It is also easier to ward off predators if you are in a group and to build shelters or care for injured people.

Closing

I hope that this document has been helpful in preparing you for any imminent disasters or dangerous situations you may find yourself in. It should be noted that this is not a professional guide, but a lay person recommendation based on personal experience and research. It is my intension to help others to be prepared for some of the disasters I have faced. These are however limited, and I would be grateful for anyone to share their experience and recommendations.

For more information or for video material you can visit the Live Ready Youtube channel.

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